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## MICROSCOPIC APPROACHES TO LIGHT NUCLEUS REACTIONS

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Quantum Monte Carlo methods, when combined with realistic models of nuclear interactions, provide an excellent description of light nuclear spectra up to mass  $A=12$ . We are presently extending these methods to treat low-energy scattering, including evaluations of resonance energy levels and widths. Results in the mass 5 system will be shown, future prospects outlined. The goal of developing these methods is to reliably predict reaction rates that are very difficult to measure experimentally.